Amendments to the Claims:

1. (currently amended) A vehicle <u>with a network having redundancy</u> comprising:

an active network for communicating data <u>including instructions on a plurality of paths</u> between devices within the vehicle, a device disposed within the vehicle and having a vehicle related function, the device being coupled to the active network, and wherein <u>redundant data is communicated between</u> the device ~~includes a device network element forming a portion of the~~ <u>and</u> active network, <u>wherein network elements of the active network are able to take action on the data in accordance with the instructions therein</u>.

2. (currently amended) The vehicle of claim 1, wherein the ~~device network element comprises a switch~~ <u>same data is carried on different paths</u>.

3. (currently amended) The vehicle of claim 1, wherein the ~~device network element comprises a router~~ <u>redundant data is carried on the same path</u>.

4. (currently amended) The vehicle of claim 1, wherein ~~the device network element comprises a bridge~~ <u>a chosen path for data is dynamically generated responsive to network status</u>.

5. (currently amended) The vehicle of claim 1, wherein the ~~active network comprises a packet data network~~ <u>data carried by the network is independent of a function of a device coupled to the network</u>.

6. (currently amended) The vehicle of claim 1, wherein the ~~device comprises a second device network element~~ <u>same data is sent on different network paths and is synchronized to arrive at an indicated node at the same time</u>.

7. (currently amended) The vehicle of claim 6, wherein ~~the device network element is coupled to a first portion of the active network and the second device network element is coupled to a second portion of the active network~~ <u>a spanning tree algorithm is used in association with</u>

-3-

the active network to define the plurality of communication paths available within the active network.

8. (currently amended) The vehicle of claim 6, wherein ~~the device network element and the second device network element are communicatively coupled~~ timing information is provided in the active network to provide synchronization.

9. (currently amended) The vehicle of claim ~~1~~ 8, wherein the ~~device includes a first functional element and a second functional element, and wherein the first functional element and the second functional element are coupled to the device network element~~ timing information is propagated from a root node element in the form of timing messages.

10. (currently amended) The vehicle of claim 9, wherein the ~~device network element comprises a first device network element and a second device network element, the first functional element being coupled to the first device network element and the second functional element being coupled to the second device network element~~ timing information includes establishing delays associated with different paths from the root node.

11. (currently amended) The vehicle of claim 10, wherein the ~~first device network element and the second device network element are communicatively coupled~~ root node sends periodic timing messages to refresh the timing information.

12. (currently amended) The vehicle of claim 1, wherein the active network ~~comprises a plurality of active network elements coupled by connection media~~ includes a defined zone wherein communication paths can not be established in the zone if a threshold percentage of the overall capacity of the zone is exceeded.

-4-

13. (currently amended) In a vehicle comprising an active network for communications within the vehicle, the active network comprising a plurality of active network elements coupled by communication media, a method of coupling a device with a vehicle related function to the active network comprising:

    providing ~~within the device an device network element and~~ a plurality of network paths coupling the device ~~network element~~ to the active network, wherein redundant data including routing instructions are communicated between the device and active network on different paths, wherein network elements of the active network are able to route the data in accordance with the routing instructions therein.

14. (currently amended) The method of claim 13, wherein the step of coupling the device ~~network element~~ to the active network ~~comprises coupling the device network element to one of the active network elements of the plurality of active network elements~~ includes synchronizing the data on the different paths.

15. (currently amended) The method of claim 14 ~~13, wherein the step of coupling the device network element to the active network comprises coupling the device network element to a first active element of the plurality of active network elements and to a second active element of the plurality of active network elements~~ further comprising the step of using a spanning tree algorithm in association with the active network to define the plurality of communication paths available within the active network.

16. (currently amended) The method of claim 14 ~~13, wherein the step of providing a device network element comprises providing a first device network element and a second device network element and wherein the step of coupling the device network element to the active network comprises coupling the first and second device network elements to the active network~~ wherein the synchronizing step includes providing timing information in the active network.

17. (currently amended) The method of claim 16, wherein the step of ~~coupling the first and second device network elements to the active network comprises coupling the first device network element to a first active element of the active network and coupling the second device~~

-5-

~~network element to a second active element of the active network~~ <u>synchronizing includes</u>
<u>propagating timing information from a root node element in the form of timing messages.</u>

18. (currently amended) The method of claim ~~16~~ <u>17</u>, wherein the step of ~~coupling the first~~
~~and second device network elements to the active network comprises coupling the first and~~
~~second device network elements to a first active element of the active network and coupling the~~
~~first and second device network elements to a second active element of the active network~~
<u>synchronizing includes the substep of establishing delays associated with different paths from the</u>
<u>root node.</u>

19. (canceled)

20. (new) The vehicle of claim 1, wherein the same data is carried on different data paths,
and wherein faults can be isolated in the network by detecting errors in one of the redundant data
streams.

-6-